

RECEIVED
CENTRAL FAX CENTER

001/024

FEB 07 2007

Serial No. 10/532,997
60469-212; OT-5043

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Meyer
Serial No.: 10/532,997
Filed: April 28, 2005
Group Art Unit: 3651
Examiner: Nicholson III, Leslie August
Title: STEPCCHAIN LINK FOR AN ESCALATOR

BEST AVAILABLE COPY

Mail Stop Appeal Brief- Patents
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

APPEAL BRIEF

Dear Sir:

Subsequent to the filing of the Notice of Appeal on December 7, 2006, Appellant hereby submits its brief. Fees in the amount of \$500.00 are paid by the attached Credit Card Payment Form. Any additional fees or credits may be charged or applied to Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds, P.C.

REAL PARTY IN INTEREST

The real party in interest is Otis Elevator Company, the assignee of the entire right and interest in this Application. Otis Elevator Company is a business unit of United Technologies Corporation.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

02/08/2007 TL0111 00000010 10532997

01 FC:1402

500.00 OP

RECEIVED
CENTRAL FAX CENTER

FEB 07 2007

Serial No. 10/532,997
60469-212; OT-5043**STATUS OF CLAIMS**

Claims 35-70 are pending in this application. Claims 35, 40, 43, 55-62, 65-68 and 70 stand finally rejected under 102(b). Claims 35-38, 40, 43, 44, 54-57, 59-62 and 64-70 stand finally rejected under 102(e). Claims 39, 41, 42 45-50, 52, 53 and 58 stand rejected under 103(a). Claims 51 and 63 are objected to, but have been indicated as being allowable. Claims 51 and 63 are not on appeal but all others are.

STATUS OF AMENDMENTS

All amendments have been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

As shown in Figure 5, this invention relates to a drive assembly 28 for a passenger conveyor system 20 including a drive member 36 and a plurality of stepchain links 30 each having a plurality of teeth 32 made of an integrated piece of material that engages a corresponding surface on the drive member 36 (page 4, lines 9 to 22 and page 5, lines 12 to 15). The plurality of teeth 32 span an entire width of an interface between the stepchain links 30 and the drive member 36 (page 8, lines 8 to 16). This basic structure is set forth in independent claim 35.

Independent claim 57 recites a drive assembly 28 for a passenger conveyor system 20 including a drive member 36 and a plurality of stepchain links 230 each having a plurality of teeth 232 made of an integrated piece of material that engages a corresponding surface on the drive member 36 (page 4, lines 9 to 22). Each stepchain link 230 comprises an inner portion 262 adapted to carry a tensile load and a distinct outer portion 272 including the plurality of teeth 232 (page 7, lines 5 to 6 and page 8, lines 1 to 6).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- A. Are Claims 35, 40, 43, 55-62, 65-68 and 70 properly rejected under 35 U.S.C. 102(b) based on *Kraft* (US 3,682,289)?

RECEIVED
CENTRAL FAX CENTER

FEB 07 2007

Serial No. 10/532,997
60469-212; OT-5043

- B. Are Claims 35-38, 40, 43, 44, 54-57, 59-62 and 64-70 properly rejected under 102(e) based on *Stuffel* (US 6,450,316)?
- C. Are Claims 41 and 42 properly rejected under 103(a) based on *Stuffel*?
- D. Are Claims 39, 45-50, 53 and 58 properly rejected under 103(a) based on *Stuffel* in view of *Tanigawa* (US 3,682,278)?
- E. Is Claim 52 properly rejected under 103(a) based on *Stuffel* in view of *Green* (US 5,520,585)?
- F. Are Claims 41 and 42 properly rejected under 103(a) based on *Kraft*?
- G. Are Claims 39, 45 and 46 properly rejected under 103(a) based on *Kraft* in view of *Tanigawa*?
- H. Is Claim 52 properly rejected under 103(a) based on *Kraft* in view of *Green*?

ARGUMENTS

A. Anticipation of Claims 35, 40, 43, 55-62, 65-68 and 70 based on *Kraft*.Claims 35, 40, 43 and 55

The Examiner finally rejected Claims 35, 40, 43 and 55 as being anticipated by *Kraft*. The present invention is patentable and strikingly different from *Kraft*. As described by the claims, a drive assembly for a passenger conveyor system includes "a plurality of stepchain links each having a plurality of teeth made of an integrated piece of material that engages a corresponding surface on said drive member." [See Claim 35] Claims 35-70 of the present invention all share these same or similar features. [See Claims 35-70].

Kraft does not disclose a drive assembly including a plurality of stepchain links each having a plurality of teeth made of an integrated piece of material as claimed. *Kraft* discloses an apparatus for guiding a conveyor including linkages 23 constructed of laminations of steel stampings having projections 25 which form teeth (column 2, lines 42 to 48, Figures 2 and 3). As shown in Figures 2 and 3, the plurality of laminations are stacked together to form the projections 25. The projections 25 are not made of an integrated piece of material. Instead, the

Serial No. 10/532,997
60469-212; OT-5043

projections 25 are made of several individual laminations that are not integrated.

Additionally, the claimed invention is not anticipated because *Kraft* does not disclose anything about an interface between a drive member and a plurality of stepchain links like what Appellant claims. *Kraft* discloses linkages 23. However, *Kraft* is silent on an interface between a drive member and the linkages 23. That is, nothing in *Kraft* discloses an interface between a drive member and the linkages 23. Therefore, the claimed invention is not anticipated by *Kraft*.

The Examiner states that it is inherent that *Kraft* includes a drive member. Even if this is true, there is nothing in *Kraft* that discloses, suggests or teaches a plurality of teeth of a stepchain link that span an entire width of an interface between stepchain link and a drive member. There is no basis, however, to conclude that the claimed relationship between a drive member and a stepchain link is "inherent." The Federal Circuit has clearly stated that inherency cannot be established simply by asserting that a certain thing may result from a given set of circumstances. To support an inherency argument, the disclosure offered by the Examiner must be "sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function" and that the missing claimed element is "necessarily present" in the reference such that it would be recognized by persons of ordinary skill. *Finnegan Corp. v. ITC*, 51 USPQ2d 1001 (Fed. Cir. 1999), quoting *In re Oelrich*, 666 F.2d 578, 212 USPQ 323 (CCPA 1981). Further, "the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic" MPEP §2112. To rely upon an inherency theory, "the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art" MPEP §2112. The Office Action has failed to meet this burden. The Examiner has not provided any basis to reasonably support the allegation that there is inherently a drive member that interacts with the linkages 23 in the claimed manner. Therefore, *Kraft* does not anticipate claims 35, 40, 43 and 55, and Appellant respectfully requests that the rejection be reversed.

Serial No. 10/532,997
60469-212; OT-5043

Claim 56

The rejection of Claim 56 is separately contested from the rejection of Claims 35, 40, 43 and 55 et al. Claim 56 recites that the plurality of teeth are made of a single piece of material. In *Kraft*, the projections 25 are not made of a single piece of material. Instead, the projections 25 are made of several individual laminations that are not integrated. Therefore, the projections 25 are not made of a single piece of material. The claimed invention is not anticipated by *Kraft*, and Appellant respectfully requests that the rejection be reversed.

Claims 57-59, 62 and 66-68

The Examiner finally rejected Claims 57-59, 62 and 66-68 as being anticipated by *Kraft*. The present invention is patentable and strikingly different from *Kraft*. As described by the claims, a drive assembly for a passenger conveyor system includes a plurality of stepchain links each including "an inner portion adapted to carry a tensile load and a distinct outer portion, and said outer portion includes said plurality of teeth." [See Claim 52] Claims 52-70 of the present invention all share these same or similar features. [See Claims 52-70].

Kraft does not disclose an inner portion adapted to carry a tensile load and a distinct outer portion. *Kraft* only discloses that the linkages 23 are constructed of laminations of steel stampings having projections 25, which does not suggest an inner portion and a distinct outer portion. Moreover, as there is no inner portion, the linkages 23 do not have an inner portion that is adapted to carry a tensile load. The claimed invention is not anticipated by *Kraft*.

Additionally, *Kraft* does not disclose a drive assembly including a plurality of stepchain links each having a plurality of teeth made of an integrated piece of material as claimed. *Kraft* discloses an apparatus for guiding a conveyor including linkages 23 constructed of laminations of steel stamping having projections 25 which form teeth (column 2, lines 42 to 48, Figures 2 and 3). As shown in Figures 2 and 3, the plurality of laminations are stacked together to form the projections 25. The projections 25 are not made of an integrated piece of material. Instead, the projections 25 are made of several individual laminations that are not integrated. The claimed

Serial No. 10/532,997
60469-212; OT-5043

invention is not anticipated by *Kraft*, and Appellant respectfully requests that the rejection be reversed.

Claim 60

The rejection of Claim 60 is separately contested from the rejection of Claims 57-59, 62 and 66-68 et al. Claim 60 recites that an attachment member is interference fit in openings in an outer portion and an inner portion to secure the inner portion to the outer portion. *Kraft* does not disclose an attachment member that is interference fit in openings in an outer portion and an inner portion to secure the inner portion to the outer portion. In *Kraft*, each step is pivoted for rotational movement about a step axle 9 that passes through frame members 3 (column 2, lines 31 to 32). The step axle 9 is not disclosed as being interference fit in openings in portions of the linkages 23 to secure the portions as claimed. The claimed invention is not anticipated by *Kraft*, and Appellant respectfully requests that the rejection be reversed.

Claim 61

The rejection of Claim 61 is separately contested from the rejection of Claims 57-59, 62 and 66-68 et al. Claim 61 recites that the outer portion of the stepchain link does not carry tensile loads. *Kraft* does not disclose an outer portion of a stepchain link that does not carry tensile loads. In *Kraft*, the linkages 23 are constructed of laminations of steel stamping having projections 25 that are stacked together to form teeth (column 2, lines 42 to 48, Figures 2 and 3). During use of the moving stairway, the step axle 9 provides a tensile load on all the laminations. Therefore, all parts of the linkages 23 are subject to a tensile load. The claimed invention is not anticipated by *Kraft*, and Appellant respectfully requests that the rejection be reversed.

Claim 65

The rejection of Claim 65 is separately contested from the rejection of Claims 57-59, 62 and 66-68 et al. Claim 65 recites that each stepchain link includes a central body portion with a

Serial No. 10/532,997
60469-212; OT-5043

drive surface having a first link edge and a second link edge, and at least some of the plurality of teeth continuously extend between the first link edge and the second link edge. *Kraft* does not disclose a stepchain link including a central body portion with a drive surface having a first link edge and a second link edge and at least some of the plurality of teeth continuously extend between the first link edge and the second link edge. In *Kraft*, the linkages 23 are constructed of laminations of steel stamping having projections 25 that are stacked to form teeth (column 2, lines 42 to 48, Figures 2 and 3). As the linkages 23 are formed of laminations, none of the projections 25 continuously extend between edges of a central body portion. Instead, there are gaps between the laminations that prevent the projections 25 from continuously extending between edges of the central body portion. The claimed invention is not anticipated by *Kraft*, and Appellant respectfully requests that the rejection be reversed.

Claim 70

The rejection of Claim 70 is separately contested from the rejection of Claims 57-59, 62 and 66-68 et al. Claim 70 recites that each stepchain link includes a plurality of teeth that span an entire width of an interface between the stepchain link and the drive member. *Kraft* does not disclose a stepchain link including a plurality of teeth that span an entire width of an interface between the stepchain link and the drive member. In *Kraft*, the linkages 23 are constructed of laminations of steel stamping having projections 25 that are stacked to form teeth (column 2, lines 42 to 48, Figures 2 and 3). As the linkages 23 are formed of laminations, none of the projections 25 span an entire width of an interface between the linkages 23 and a drive member. Instead, there are gaps between the laminations that prevent the projections 25 from spanning the entire width of the interface. The claimed invention is not anticipated by *Kraft*, and Appellant respectfully requests that the rejection be reversed.

Serial No. 10/532,997
60469-212; OT-5043

**B. Anticipation of Claims 35-38, 40, 43, 44, 54-57, 59-62 and 64-70 based on *Stuffel*.
Claims 35-38, 40, 43, 44 and 54-56**

Claims 35-38, 40, 43, 44, 54-57, 59-62 and 64-70 are rejected under 35 U.S.C. 102(e) as being anticipated by *Stuffel*. The claims recite that each stepchain link includes a plurality of teeth that span an entire width of an interface between the stepchain link and a drive member. The claimed invention is not anticipated because *Stuffel* does not disclose anything about an interface between a drive member and a plurality of stepchain links like what Appellant claims. *Stuffel* discloses drive chain links 40. However, *Stuffel* is silent on an interface between a drive member and the drive chain links 40. That is, nothing in *Stuffel* discloses an interface between a drive member and the drive chain links 40. Therefore, the claimed invention is not anticipated by *Stuffel*.

The Examiner states that it is inherent that *Stuffel* includes a drive member. Even if this is true, there is nothing in *Stuffel* that discloses, suggests or teaches a plurality of teeth of a stepchain link that span an entire width of an interface between stepchain link and a drive member. There is no basis, however, to conclude that the claimed relationship between a drive member and a step-chain link is "inherent." The Federal Circuit has clearly stated that inherency cannot be established simply by asserting that a certain thing may result from a given set of circumstances. To support an inherency argument, the disclosure offered by the Examiner must be "sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function" and that the missing claimed element is "necessarily present" in the reference such that it would be recognized by persons of ordinary skill. *Finnegan Corp. v. ITC*, 51 USPQ2d 1001 (Fed. Cir. 1999), quoting *In re Oelrich*, 666 F.2d 578, 212 USPQ 323 (CCPA 1981). Further, "the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic" MPEP §2112. To rely upon an inherency theory, "the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent

Serial No. 10/532,997
60469-212; OT-5043

characteristic necessarily flows from the teachings of the applied prior art" MPEP §2112. The Office Action has failed to meet this burden. The Examiner has not provided any basis to reasonably support the allegation that there is inherently a drive member that interacts with the drive chain links 40 in the claimed manner. Therefore, *Stuffel* does not anticipate claims 35-38, 40, 43, 44 and 54-56, and Appellant respectfully requests that the rejection be reversed.

Claims 57, 59, 62 and 64-70

Claims 57, 59, 62 and 64-70 are also not anticipated by *Stuffel*. *Stuffel* does not disclose a drive assembly including a plurality of stepchain links each having an inner portion adapted to carry a tensile load and a distinct outer portion that includes a plurality of teeth made of an integrated single piece of material. *Stuffel* discloses an escalator with a step flange including a drive chain link 40. However, *Stuffel* does not disclose that the drive chain link 40 includes an inner portion that is adapted to carry a tensile load and a distinct outer portion as claimed. The *Stuffel* drive chain link 40 does not disclose an inner portion and a distinct outer portion. The claimed invention is not anticipated.

Additionally, *Stuffel* does not disclose a stepchain link that includes a plurality of teeth that span an entire width of an interface between the stepchain link and a drive member as claimed. The claimed invention is not anticipated because *Stuffel* does not disclose anything about an interface between a drive member and a plurality of stepchain links like what Appellant claims.

Stuffel discloses a drive chain link 40. However, *Stuffel* is silent on an interface between a drive member and the drive chain links 40. That is, nothing in *Stuffel* that discloses an interface between a drive member and the drive chain links 40.

The Examiner states that it is inherent that *Stuffel* includes a drive member. Even if this is true, there is nothing in *Stuffel* that discloses, suggests or teaches a plurality of teeth of a stepchain link that span an entire width of an interface between stepchain link and a drive member. The Federal Circuit has clearly stated that inherency cannot be established simply by asserting that a certain thing may result from a given set of circumstances. To support an inherency argument,

Serial No. 10/532,997
60469-212; OT-5043

the disclosure offered by the Examiner must be "sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function" and that the missing claimed element is "necessarily present" in the reference such that it would be recognized by persons of ordinary skill. *Finnegan Corp. v. ITC*, 51 USPQ2d 1001 (Fed. Cir. 1999), quoting *In re Oelrich*, 666 F.2d 578, 212 USPQ 323 (CCPA 1981). Further, "the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic" MPEP §2112. To rely upon an inherency theory, "the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art" MPEP §2112. The Office Action has failed to meet this burden. The Examiner has not provided any basis to reasonably support the allegation that there is inherently a drive member that interacts with the drive chain links 40 in the claimed manner. Therefore, *Stuffel* does not anticipate claims 57, 59, 62 and 64-70, and Appellant respectfully requests that the rejection be reversed.

Claim 60

The rejection of Claim 60 is separately contested from the rejection of Claims 57, 59, 62 and 64-70 et al. Claim 60 recites that an attachment member is interference fit in openings in the outer portion and the inner portion to secure the inner portion to the outer portion. *Stuffel* does not disclose an attachment member that is interference fit in openings in the outer portion and the inner portion to secure the inner portion to the outer portion. In *Stuffel*, a drive chain 38 includes axles 36 and drive chain links 40 (column 2, lines 42 to 45). *Stuffel* does not disclose that the axles 36 are interference fit in the openings in the drive chain links 40. The claimed invention is not anticipated by *Stuffel*, and Appellant respectfully requests that the rejection be reversed.

Serial No. 10/532,997
60469-212; OT-5043

Claim 61

The rejection of Claim 61 is separately contested from the rejection of Claims 57, 59, 62 and 64-70 et al. Claim 61 recites that an outer portion of the stepchain link does not carry tensile loads. *Stuffel* does not disclose that an outer portion of a drive chain link 40 does not carry tensile loads. During use of the moving stairway, the axles 36 provide a tensile load on the entire drive chain link 40. Therefore, no part of the drive chain links 40 is not subject to tensile loads. The claimed invention is not anticipated by *Stuffel*, and Appellant respectfully requests that the rejection be reversed.

C. Obviousness of claims 41 and 42 based on *Stuffel*.

Claims 41 and 42

Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Stuffel*. The proposed rejection under 35 U.S.C. 103(a) cannot be made in view of *Stuffel*. *Stuffel* could only qualify as prior art under 35 U.S.C. 102(e). 35 U.S.C. 103(c) states that "subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person." *Stuffel* and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person (Otis Elevator Company). Therefore, *Stuffel* cannot be used in a 103(a) combination because it is subject to assignment to the same person as the present invention. The rejection is improper, and Appellant respectfully requests that the rejection be reversed.

Serial No. 10/532,997
60469-212; OT-5043

D. Obviousness of claims 39, 45-50, 53 and 58 based on *Stuffel* in view of Tanigawa.
Claims 39, 45-50, 53 and 58

Claims 39, 45-50, 53 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Stuffel*. The proposed rejection under 35 U.S.C. 103(a) cannot be made in view of *Stuffel*. *Stuffel* could only qualify as prior art under 35 U.S.C. 102(e). 35 U.S.C. 103(c) states that "subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person." *Stuffel* and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person (Otis Elevator Company). Therefore, *Stuffel* cannot be used in a 103(a) combination because it is subject to assignment to the same person as the present invention. The rejection is improper, and Appellant respectfully requests that the rejection be reversed.

E. Obviousness of claim 52 based on *Stuffel* in view of Green.
Claim 52

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Stuffel*. The proposed rejection under 35 U.S.C. 103(a) cannot be made in view of *Stuffel*. *Stuffel* could only qualify as prior art under 35 U.S.C. 102(e). 35 U.S.C. 103(c) states that "subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person." *Stuffel* and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person (Otis Elevator Company).

Serial No. 10/532,997
60469-212; OT-5043

Therefore, *Stuffel* cannot be used in a 103(a) combination because it is subject to assignment to the same person as the present invention. The rejection is improper, and Appellant respectfully requests that the rejection be withdrawn.

F. Obviousness of claims 41 and 42 based on Kraft.

Claims 41 and 42

Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kraft*. The claimed invention is not obvious because *Kraft* does not disclose, suggest or teach a drive assembly including a plurality of stepchain links each having a plurality of teeth made of an integrated piece of material. The stepchain links comprise laminations in *Kraft* (see, e.g., column 2, lines 46-47) and, therefore, do not have teeth made of an integrated piece of material as claimed. The linkages 23 of *Kraft* are formed of a plurality of laminations that form the projections 25 and therefore it is impossible for *Kraft* to include projections 25 made of an integrated piece of material as recited in Appellant's claimed invention. Therefore, *Kraft* does not render the claimed invention obvious even if the dimensions of Appellant's claims could be used with *Kraft*'s laminated links. The rejection is improper, and Appellant respectfully requests that the rejection be withdrawn.

G. Obviousness of claims 39, 45 and 46 based on Kraft in view of Tanigawa.

Claims 39 and 46

Claims 39 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kraft* in view of *Tanigawa*. The claimed invention is not obvious because neither *Kraft* nor the added *Tanigawa* reference disclose, suggest or teach a drive assembly including a plurality of stepchain links each having a plurality of teeth made of an integrated piece of material. The stepchain links comprise laminations in *Kraft* (see, e.g., column 2, lines 46-47) and, therefore, do not have teeth made of an integrated piece of material as claimed. The linkages 23 of *Kraft* are formed of a plurality of laminations that form the projections 25 and therefore it is impossible for *Kraft* to

Serial No. 10/532,997
60469-212; OT-5043

include projections 25 made of an integrated piece of material as recited in Appellant's claimed invention. Therefore, *Kraft* does not render the claimed invention obvious. The rejection is improper, and Appellant respectfully requests that the rejection be reversed.

Claim 45

Claim 45 is separately contested from the rejection of Claims 39 and 46. Claim 45 recites that the stepchain link comprises a single piece of die cast metal. The claimed invention is not obvious because *Kraft* specifically discloses that the linkages 23 are formed from a plurality of laminations. There is no reason or motivation to form the linkages 23 of a single piece of diecast metal as this would go against the teachings of *Kraft*. That is, as the linkages 23 of *Kraft* are formed of laminations, it is not possible to form the linkages 23 of a single piece of die cast metal without going directly contrary to *Kraft*'s express teachings. Such a modification cannot be made. The claimed invention is not obvious, and Appellant respectfully requests that the rejection be reversed.

H. Obviousness of claim 52 based on Kraft in view of Green.

Claim 52

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Kraft* in view of *Green* (US 5,520,585). The claimed invention is not obvious because neither *Kraft* nor the added *Green* reference disclose, suggest or teach a drive assembly including a plurality of stepchain links each having a plurality of teeth made of an integrated piece of material. The stepchain links comprise laminations in *Kraft* (see, e.g., column 2, lines 46-47) and, therefore, do not have teeth made of an integrated piece of material as claimed. The separate laminations expressly used in *Kraft* make it impossible for the proposed combinations to result in Appellant's claimed invention. Therefore, the references taken together do not render the claimed invention obvious.

Additionally, there is no motivation to employ a plastic plate including the plurality of teeth in *Kraft*. *Kraft* already includes linkages 23 having projections 25. Therefore, there is no

RECEIVED
CENTRAL FAX CENTER

FEB 07 2007

Serial No. 10/532,997
60469-212; OT-5043


reason or motivation to employ a plastic plate including teeth in *Kraft* because *Kraft* already includes projections 25. The claimed invention is not obvious. The rejection is improper, and Appellant respectfully requests that the rejection be reversed.

CONCLUSION

For the reasons set forth above, the rejections are improper and should be reversed. Appellant respectfully requests such an action.

Respectfully Submitted,

CARLSON, GASKEY & OLDS, P.C.



Karin H. Butchko
Registration No. 45,864
Attorney for Appellant
400 West Maple Road, Suite 350
Birmingham, Michigan 48009
(248) 988-8360

Dated: February 7, 2007

CERTIFICATE OF FACSIMILE

I hereby certify that this appeal brief is being facsimile transmitted to the United States Patent and Trademark Office, 571-273-8300 on February 7, 2007.


Karin Butchko

RECEIVED
CENTRAL FAX CENTER
FEB 07 2007

Serial No. 10/532,997
60469-212; OT-5043

CLAIM APPENDIX

35. A drive assembly for a passenger conveyor system comprising:
a drive member; and
a plurality of stepchain links each having a plurality of teeth made of an integrated piece of material that engages a corresponding surface on said drive member, said plurality of teeth span an entire width of an interface between said stepchain links and said drive member.
36. The drive assembly as recited in claim 35 wherein each said stepchain link includes an end having two spaced apart portions that at least partially receive another end of another one of said stepchain links.
37. The drive assembly as recited in claim 36 where said two spaced apart portions of said end each include a hole and said another end includes a corresponding hole, and an attachment member is received through said holes and said corresponding hole to secure said end to said another end.
38. The drive assembly as recited in claim 36 wherein said two spaced apart portions comprise at least some of said plurality of teeth.
39. The drive assembly as recited in claim 35 wherein said plurality of teeth are made of metal.
40. The drive assembly as recited in claim 35 wherein said plurality of said stepchain links form a chain that contacts said drive member at said interface, and said entire width of said interface is transverse to a length of said chain, and said plurality of teeth continually engage said drive member at said interface.

Serial No. 10/532,997
60469-212; OT-5043

41. The drive assembly as recited in claim 35 wherein said width of said interface between said drive member and said plurality of stepchain links is between 40 mm and 100 mm.
42. The drive assembly as recited in claim 41 wherein said width of said interface between said drive member and said plurality of stepchain links is 65 mm.
43. The drive assembly as recited in claim 35 wherein said plurality of stepchain links form a chain having a length, and said plurality of teeth have a teeth width which is transverse to said length of said chain, and said teeth width is substantially constant along said entire length of said chain.
44. The drive assembly as recited in claim 35 wherein said plurality of stepchain links form a chain having a length, and said plurality of teeth have a teeth pitch which is substantially constant along said entire length of said chain.
45. The drive assembly as recited in claim 35 wherein each said stepchain link comprises a single piece of die cast metal.
46. The drive assembly as recited in claim 45 where said die cast metal is selected from the group consisting of aluminum and magnesium.
47. The drive assembly as recited in claim 35 where each said stepchain link comprises an inner portion comprising at least one planar metal piece and an outer portion having said plurality of teeth.

Serial No. 10/532,997
60469-212; OT-5043

48. The drive assembly as recited in claim 47 wherein said inner portion includes an opening and said outer portion includes a corresponding opening, and an attachment member is received through said opening and said corresponding opening to secure said inner portion to said outer portion.

49. The drive assembly as recited in claim 47 wherein each said inner portion is adapted to carry a tensile load on said stepchain links and each said outer portion does not carry said tensile loads.

50. The drive assembly as recited in claim 47 wherein said outer portion has a first side and a second side and a bottom portion extending therebetween, said bottom portion having at least some of said plurality of teeth.

51. The drive assembly as recited in claim 50 including a second planar metal piece, and wherein a distance between said at least one planar metal piece and said second planar metal piece is less than a width of said bottom portion.

52. The drive assembly as recited in claim 47 including a plate having said plurality of teeth secured on said outer portion, wherein said plate is plastic.

53. The drive assembly as recited in claim 47 wherein said outer portions of said stepchain links do not contact said outer portion of an adjacent one of said stepchain links.

54. The drive assembly as recited in claim 35 where each said stepchain link comprises a central body portion including a drive surface having a first link edge and an opposing second link edge, and at least some of said plurality of teeth continuously extend between said first link edge and said opposing second link edge of said central body portion.

Serial No. 10/532,997
60469-212; OT-5043

55. The drive assembly as recited in claim 35 wherein said stepchain link comprises a central body portion, and at least some of said plurality of teeth are located on said central body portion.

56. The drive assembly as recited in claim 35 wherein the plurality of teeth are made of a single piece of material.

57. A drive assembly for a passenger conveyor system comprising:
a drive member; and
a plurality of stepchain links each having a plurality of teeth made of an integrated piece of material that engages a corresponding surface on said drive member, wherein each said stepchain link comprises an inner portion adapted to carry a tensile load and a distinct outer portion, and said outer portion includes said plurality of teeth.

58. The drive assembly as recited in claim 57 wherein said inner portion comprises at least one planar metal piece.

59. The drive assembly as recited in claim 57 wherein said inner portion includes an opening and said outer portion includes a corresponding opening, and an attachment member is received through said opening and said corresponding opening to secure said inner portion to said outer portion.

60. The drive assembly as recited in claim 59 wherein said attachment member is interference fit in said opening and said corresponding opening.

61. The drive assembly as recited in claim 57 wherein each said outer portion does not carry said tensile loads.

Serial No. 10/532,997
60469-212; OT-5043

62. The drive assembly as recited in claim 57 wherein said outer portion has a first side and a second side and a bottom portion extending therebetween, said bottom portion having at least some of said plurality of teeth.

63. The drive assembly as recited in claim 62 wherein said inner portion comprises a first planar metal piece and a second planar metal piece, and a distance between said at least one planar metal piece and said second planar metal piece is less than a width of said bottom portion.

64. The drive assembly as recited in claim 57 wherein said outer portion of said stepchain links do not contact said outer portion of an adjacent one of said stepchain links.

65. The drive assembly as recited in claim 57 where each said stepchain link comprises a central body portion including a drive surface having a first link edge and an opposing second link edge, and at least some of said plurality of teeth continuously extend between said first link edge and said opposing second link edge of said central body portion.

66. The drive assembly as recited in claim 57 wherein said stepchain link comprises a central body portion, and at least some of said plurality of teeth are located on said central body portion.

67. The drive assembly as recited in claim 57 wherein said plurality of said stepchain links form a chain that contacts said drive member at an interface, and an entire width of said interface is transverse to a length of said chain, and said plurality of teeth continually engage said drive member at said interface.

Serial No. 10/532,997
60469-212; OT-5043

68. The drive assembly as recited in claim 57 wherein said plurality of stepchain links form a chain having a length, and said plurality of teeth have a teeth width which is transverse to said length of said chain, and said teeth width is substantially constant along said entire length of said chain.

69. The drive assembly as recited in claim 57 wherein said plurality of stepchain links form a chain having a length, and said plurality of teeth have a teeth pitch which is substantially constant along said entire length of said chain.

70. The drive assembly as recited in claim 57 wherein said plurality of teeth span an entire width of an interface between said stepchain links and said drive member.

RECEIVED
CENTRAL FAX CENTER

022/024

FEB 07 2007

Serial No. 10/532,997
60469-212; OT-5043

EVIDENCE APPENDIX

None

RECEIVED
CENTRAL FAX CENTER

FEB 07 2007

Serial No. 10/532,997
60469-212; OT-5043

RELATED PROCEEDINGS APPENDIX

None

N:\Clients\OTIS ELEVATOR\IP00212\PATENT\212appealbrief.doc

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.